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Official Organ of the League of Motor Sportsmen.

MOTOR SPORT

Vol. 5. No 3.

June, 1929

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OBJECTS OF THE LEAGUE.

With the support of sporting motorists throughout the country the League will strive:—

To promote the cause of Road Racing in this country.

To foster Motoring Sport in all its aspects.

To combat unjust Police persecution.

To educate Public Opinion, which is so definitely anti-motorist.

To restore the Chivalry and Fellowship of the Road, which, with the increase of purely utility motoring, is fast dying out.

To establish a bond between all owners of sports vehicles, cars or motor cycles.

To show, by example, that the owner of a sports machine is the finest and most competent driver on the road, and by adopting the slogan of "Speed with Safety," show to all other road users that the members of the League of Motor Sportsmen are drivers whose consideration for all road-users is equalled only by their expert driving.

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Fill in the form at the foot of this page, or write giving the required details.

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If you already are a subscriber to *Motor Sport* remit only 3/6 for the League Badge. If not yet a subscriber, remit 12/- extra to cover twelve months' subscription.

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NOTICE TO CONTRIBUTORS.

All contributions, whether literary, artistic or photographic, will be carefully considered by the Editor. A stamped, addressed envelope should be sent with every contribution, and the Editor will endeavour to return all matter he is unable to accept. Neither the Editor nor the proprietors are responsible for the loss of any contributions.

NOTICE TO CLUB SECRETARIES.

Club Secretaries are specially invited to send the Editor paragraphs about the activities of their Clubs, and, in particular, notice of forthcoming events. All reports of competitions, meetings and other events should be sent to the Editor as early as possible, and must be received by the 20th of the month, to ensure attention for the next issue. Address contributions to: The Editor, MOTOR SPORT, 121 Chandos House, Buckingham Gate, S.W.1.

EDITORIAL.

The principal feature of this issue is the report on the double twelve hour race, which, organized by the Junior Car Club, drew a large crowd to Brooklands on Friday and Saturday, May 10th and 11th. This race, the first of its kind to be run in this country, was very well supported, there being no less than fifty-six entrants. This kind of race for standard sports cars is becoming increasingly popular and it is a significant fact that more of them are being organised each season.

We now hear that that famous American classic, the 500 mile Indianapolis race, will in future be for standard sports type of cars, which is very gratifying since the racing cars which have been produced in the last few years have been of little use for anything except "Grand Prix" purposes, and now manufacturers will have a chance of concentrating on the production of super-efficient sports cars.

The sporting motorist will benefit very largely by this means in the long run, and one result will probably be the production of the now long overdue silent sports car. A few years ago the majority of sports cars were extremely noisy, and it is noticeable that the manufacturers now appear to be able to obtain the same degree of engine efficiency with very much less noise, both mechanical and exhaust.

The review of the 4½ Litre Invicta, which is contained in this issue, will no doubt be of interest to our readers since the acceleration curve of this car is a nearer approach to a straight line than that of any other standard car we know.

The International Tourist Trophy races have now become a matter of history, and soon after these lines are in print the fate of the entrants will be decided. The motor cycle manufacturers interested and the riders are naturally rather on edge at this time wondering how their machines will behave, and after months of careful preparation their efforts are rewarded or otherwise in a few hours.

THE JUNIOR CAR CLUB'S DOUBLE TWELVE HOUR RACE.

ALFA ROMEO DRIVEN BY G. RAMPONI WINS FROM BENTLEY.

THE Junior Car Club who conceived the idea of organising a British twenty-four hour race, deserve all the credit they have been given for taking such a bold step as to run a race of this kind for the first time in the history of British Motor Racing.



THE WINNER, G. RAMPONI, ALFA-ROMEO, AT SPEED.

For many years now we have had the Le Mans 24 hours race, which has always been well supported by British entrants, and which they have won on more than one occasion, and this, no doubt, encouraged the Junior Car Club to organise such an event which, however, is not quite so strenuous as the Le Mans event in that the French Classic is 24 hours straight off the reel, whereas the Junior Car Club event has to consist of two succeeding races each of 12 hours since the Brooklands authorities are unable to permit racing throughout the night.

The start took place at 8 a.m. on Friday, May 10th. The cars were lined up in front of the pits and on receiving the signal to "go" the drivers, who were lined up opposite their cars sprinted across the track, raised their hoods, and midst the roar from their exhausts and the whine from the superchargers they began to sort themselves out.

Kaye Don and G. Ramponi, both on supercharged Alfa Romeos, were first away closely followed by the four Bentleys. The Lombards were slow in getting away and the big six Bentley, which had taken the lead, had completed its first lap before they started. The big six Bentley was closely followed on its first lap by the Alfa Romeos, the other Bentleys and Earl Howe's 2 litre Bugatti.

The drivers now settled down to some fast steady laps during which they jockeyed for position and obtained their team formation, while the *chefs d'équip* in the pits anxiously worked out innumerable calculations and then signalled to the drivers faster, slower. After the first ten laps or so the drivers came in one by one, lowered their hoods and were

off again in a few seconds. Immediately the hoods had been lowered the speeds rose, and it was very soon apparent that the battle was going to be between the Bentleys and the Alfa Romeos who were lapping at 87 m.p.h. and 80 m.p.h. respectively. Since the regulations demanded that every car had to cover one quarter of its minimum distance in each period of six hours each driver was now endeavouring to exceed his schedule as much as possible so as to have time in hand to stop for repairs or adjustments should this become necessary.

The race being run on a handicap basis was rather difficult to follow since the fastest car was not necessarily the leader, but matters were made very much easier in this respect by the new score board, on which, not only the three leaders' numbers were painted every three hours but also all the individual class leaders. Towards the end of the third hour what might have been a very serious accident occurred to Captain A. G. Miller, who was driving a supercharged Lombard. Captain Miller was approaching the bend at high speed when suddenly one of his front wheel brake shoes seized which caused the car to swing around and narrowly escape hitting some of the other competitors.

At the end of the first three hours the cars came in for refueling and in most cases for a change of driver. The six cylinder Bentley was now in the lead with two 4½ litres second and third, and Ivanowsky on Alfa Romeo No. 54 fourth. The Alfa Romeos pit work was very neat and they were off again in about 1½ minutes, whereas the Bentleys were about twice this time, since it took very much longer to fill their tanks and compensate for their voracious appetite.

Shortly after the first change over the speed of the cars began to increase. The Rileys who were leading the 1,100 c.c. class began lapping at 74 m.p.h., the Alfa Romeos, who were leading the 1,500 c.c.



NO. 5 BENTLEY, S. C. H. DAVIS DRIVING, THUNDERING DOWN THE STRAIGHT, ON THE EXTREME LEFT.

JUNIOR CAR CLUB'S DOUBLE TWELVE—continued.

class, 84 m.p.h., the 4½ litre Bentleys 90, and the big six Bentley at 94–95 m.p.h.

Earl Howe's Bugatti paid several visits to the pits, A. O. Saunders Davies' Invicta lost its silencer, and then G. E. T. Eyston who had taken over Alfa Romeo No. 55 from Kaye Don was seen pushing his car into the pits with engine trouble. At the end of the sixth hour the six cylinder Bentley was still holding the lead, S. C. H. Davis on a 4½ being second, and Ivanowsky on Alfa Romeo No. 54 holding third place. It was here that bad luck overtook the Bentley team for soon Benjafield was seen coming into the pits on the big six Bentley. He and his mechanic quickly got to work and removed the radiator and dynamo only to find that the dynamo coupling had sheared. They quickly replaced the radiator and resumed their wonderful run but were, unfortunately,

stopped shortly afterwards by the officials who would not allow them to continue without the dynamo. Thus, what was easily the fastest car in the race was put out of action and now Ramponi assumed the lead on his Alfa Romeo closely followed by his team mate Ivanowsky with the 4½ litre Bentley No. 5 in third place.

Shortly after the eighth hour the Riley driven by Staniland and Cobb, which was leading the 1,100 c.c. class, was forced out of the race with big end trouble, thus allowing Riley No. 75 to lead its class and shortly afterwards reach third position in the general classification when Bentley No. 5 was forced to retire also with big end trouble.

After nine hours Ramponi and his Alfa Romeo still held the lead closely followed by Bentley No. 6



ROUNDING THE BEND IN THE J.C.C. DOUBLE TWELVE. RAMPONI CAN BE SEEN LEADING CLOSELY FOLLOWED BY EARL HOWE, BUGATTI NO. 14, BENTLEY NO. 5, BENTLEY NO. 12, AND G. NEWMAN, BUGATTI NO. 15.

JUNIOR CAR CLUB'S DOUBLE TWELVE—continued.

in second place and Riley No. 75 third. W. M. Couper on a Lagonda was leading the 2 litre class and the two Studebakers were lapping very consistently without any apparent fuss or bother at 73—74 m.p.h. Shortly after the tenth hour Riley No. 75 was forced to retire with big end trouble which let Birkin's No. 12 into third place. His mechanic was, unfortunately, badly burned about this time through his clothes, over which he had spilt some petrol whilst refilling, becoming ignited. He fortunately rolled on the ground and after a time the flames were extinguished with Pyrenes but not before he had been badly burned and had to be removed to hospital.

The retirement of Riley No. 75 allowed Salmson No. 82, which had been going very steadily, to assume the lead in the 1,100 c.c. class and fourth place in the general classification. At 8 p.m. when the maroon was fired G. Ramponi streaked down the finishing straight on his Alfa Romeo having won the first day's race at an average speed of 77.57 m.p.h. Bentley No. 6 driven by S. C. Davis and Sir R. Gunter finished second with Ivanowsky on Alfa Romeo No. 54, and H. R. S. Birkin on Bentley No. 12 was third. The two Studebakers who were the sole survivors of Class B. (up to 8,000 c.c.) finished in perfect condition having averaged 72 m.p.h. and run with clocklike regularity. The Aston Martin was close behind Ivanowsky's Alfa Romeo, and R. R. Jackson still held the lead in the 2 litre class on his Lagonda closely followed by W. M. Couper on another car of the same make. The Salmson still held the lead in the 1,100 c.c. Class closely followed by Riley No. 74, and the lone 750 c.c. Class entrant, Austin No. 86, driven by the Barnes brothers had run with remarkable steadiness throughout and averaged nearly 50 m.p.h.

So ended the first day's race. All the cars less the seventeen retirements were now pushed into their allotted stalls in the Paddock where they were wrapped up so as to ensure an easy start in the morning.

The next morning all the cars were lined up again outside their pits and at 8 a.m. the starter's flag dropped for the start of what turned out to be one of the most exciting races in history. The little Austin was first away closely followed by the Invicta, Birkin's Bentley and the two Alfa Romeos, Nos. 53 and 54. For the first two laps the drivers toured round at a steady speed so as to warm up their engines as carefully as possible and then on being signalled from their respective pits they increased their speed to normal. The race now resolved itself into a terrific duel between S. C. H. Davis on Bentley No. 6, and the two Alfa Romeos driven by Ramponi and Ivanowsky who in turn were closely followed by Casse on the Salmson. Round after round they circled, first one leading then the other. To make matters much more difficult for the drivers rain now began to fall and as a result the speed immediately began to decrease. S. C. H. Davis on Bentley No. 6 narrowly escaped disaster when his Bentley developed first a front wheel skid followed by a rear wheel skid which caused

the tail of his car to slither round and hit the sandbank. Sand shot high in the air but the Bentley continued unhurt save for the loss of the accumulator box lid. Mrs. Chetwynd who drove a Frazer Nash with her husband was another unfortunate competitor who developed a serious skid when her car nearly turned round as she was nearing the bend. She, however, managed to right her car and continued. All the other cars appeared to be skidding very badly and a sigh of relief went up when the rain stopped and the track began to dry.

After fifteen hours Ramponi on his Alfa Romeo was still in the lead and in spite of his having driven without a change of driver was going better than ever. S. C. H. Davis' Bentley was hot on his heels, followed by Bentley No. 12. J. Dunfree was unfortunately forced to retire with his Alfa Romeo owing to stripped timing gears, and T. E. Rose Richard's Lagonda was also forced out of the race by engine trouble. Ivanowsky Alfa Romeo spent some time in the pits but again resumed the race at the same high speed as Ramponi. The O. M's were very regular in spite of persistent misfiring which, however, did not increase in intensity. Earl Howe's Bugatti paid several visits to the pits but in spite of this his speed got slower and slower. The Frazer Nash's also paid several visits to the pits but managed to keep going albeit slow compared with the other 1,500 c.c. cars. The two F.W.D. Alvis were very regular but very noisy mechanically, and the Lea Francis team who were going well appeared to be suffering from either weak springing or loose shock absorbers. And in front of all lap after lap drove Ramponi and Davis each cornering magnificently and gradually increasing their lap speeds.

After eighteen hours Ramponi was still leading on his Alfa Romeo but Davis on Bentley No. 6 was very near now and it was evident that if he continued at his present high speed he would soon overhaul the fleet little Italian car. The Salmson had now worked up into third place since H. R. S. Birkin on Bentley No. 12 was forced to retire with bearing trouble. The Lagondas' began to pay frequent visits to their pits but were off again without any waste of time. Earl Howe's Bugatti appeared to be going up in a cloud of smoke but he struggled on grimly in spite of being nearly suffocated. And now misfortune overtook Ramponi and he was forced into his pits with a loose accumulator box which he and his mechanic after much feverish work managed to secure with strap and rope, but not before Davis' Bentley had passed and gained a useful lead over him. Soon after Ramponi had resumed the race Bentley No. 6 came into the pits with a flat tyre and thus the Alfa Romeo regained the lead which it again held at the twenty-first hour. The Alvis driven by Mr. and Mrs. Dykes was forced to retire with axle trouble.

Now started the most exciting race that has been seen for many years. Lap after lap the Alfa Romeos reeled off, superbly driven and cheered on each circuit with cries of Viva! Viva! from a knot of Italian supporters. Their cornering was magnificent

JUNIOR CAR CLUB'S DOUBLE TWELVE—continued.

and their gear changing perfect. It was noticeable how the Italian drivers always picked exactly the same course and always changed gear at exactly the same spot. Their method was to start the corner well over on the right, cut it very close in the centre, and finish the turn with the aid of the banking, down which they then swept so as to increase their speed, but in spite of all their wonderful efforts Bentley No. 6 was slowly gaining on them. The Alfa Romeo pit now signalled to Ramponi to go all out and as a result he began to drive like a demon, closely followed by his team mate Ivanowsky. Faster and faster they cornered, their mechanics opening the doors and leaning right out in an effort to steady the cars. The majority of the other cars appeared to be crawling around as the little red Alfas passed them one by one on the corner all except the Bentley, which in spite of being a much heavier car was handled equally as well and was if anything even faster on the corner. Down the railway straight the Bentley passed the Alfas who tucked themselves in behind it so as to benefit by its slip-stream only to be shaken off when the bigger car got well over the 100 m.p.h. mark. And so little by little the British car began to gain on formula until the stewards noticing that the bonnet clip of the Bentley was undone ordered Davis into the pits to do it up. This piece of bad luck probably cost Davis the race since Ramponi made full use of every second and began to increase his lead again, and now, try as he might, Davis could not catch the Italian car in spite of the Bentley going faster than ever. Thus were the cars tearing around when the maroon sounded, the flag was raised and one by one they stopped at their pits to await the result! It was nearly a quarter of an hour before the timekeepers, who had worked out the results to three places of decimals, announced that the Italian car had won by 0.03 on the formula basis, which will give some idea of the terrific struggle which had taken place. The Salmson which had been gradually increasing its speed was third, and Ivanowsky on the other Alfa Romeo finished fourth. The 4½ litre Bentley covered 1,950 miles at an average speed of 81.39 m.p.h., and the Alfa Romeo 1,824 miles at an average speed of 76 m.p.h. The two Studebakers finished in perfect condition both having made wonderfully consistent runs. W. M. Couper was first home in the 2 litre class on his Lagonda and the unsupercharged Aston Martin put up a really wonderful performance by finishing third in the 1½ litre class at an average speed of 69.36!

RESULTS:—

GENERAL CLASSIFICATION.

1st. G. Ramponi,	1487 c.c. supercharged Alfa Romeo, 76 m.p.h.
2nd. S. C. H. Davis	} 4398 c.c. Bentley, 81.39 m.p.h.
Sir R. Gunter	
3rd. M. Vincendon	
F. J. Clarke	
G. Casse	} 1098 c.c. Salmson, 67.95 m.p.h.

CLASS RESULTS.

Class B. Over 5000 c.c. and up to 8000 c.c.	
1st. A. Hollidge	} 5518 c.c. Studebaker, 71.29 m.p.h.
G. A. W. Laird	

2nd. C. W. Johnstone	} 5518 c.c. Studebaker.
A. E. S. Walter	
Class C. Over 3000 c.c. and up to 5000 c.c.	
1st. S. C. H. Davis	} 4398 c.c. Bentley, 81.39 m.p.h.
Sir R. Gunter	
2nd. W. B. Scott	
Mrs. W. B. Scott	} 4398 c.c. Bentley.
3rd. A. D. S. Davies	
C. W. Fienes	} 4467 c.c. Invicta.
Class D. Over 2000 c.c. and up to 3000 c.c.	
No finishers.	
Class E. Over 1500 c.c. and up to 2000 c.c.	
1st. W. M. Couper	} 1954 c.c. Lagonda, 70.59 m.p.h.
2nd. W. E. Edmondson	
G. Roberts	} 1954 c.c. Lagonda.
3rd. R. R. Jackson	
C. A. Broomhall	} 1954 c.c. Lagonda
Class F. Over 1100 c.c. and up to 1500 c.c.	
1st. G. Ramponi	} 1487 c.c. Alfa Romeo, 76 m.p.h.
2nd. B. Ivanowsky	
3rd. A. C. Bertelli	} 1488 c.c. Aston Martin.
F. Bezzant	
Class G. Over 750 c.c. and up to 1100 c.c.	
1st. M. Vincendon	} 1097 c.c. Salmson, 67.95 m.p.h.
F. J. Clarke	
G. Casse	
2nd. B. Lewis	} 1089 c.c. Riley
H. Wood	
3rd. S. Watt	} 990 c.c. Fiat.
Class H. Under 750 c.c.	
1st. F. S. Barnes	} 748 c.c. Austin, 47.58 m.p.h.
J. D. Barnes	
No other entrant.	

THE SCOTTISH SIX DAYS.

The Scottish Six Days' Trial this year is the only event of this type run off in Great Britain. Severe gradients, water-plashes and boulder-strewn tracks were the order of the day, and in view of the riding conditions, the total distance, 1,006 miles, was more than sufficient for many competitors.

The most important of the Premier Awards were as follows: Best solo under 200 c.c., B. Kershaw (James-Villiers); best 250-350 c.c., F. E. Thacker (Ariel); best solo over 350 c.c., J. H. Amott (Rudge-Whitworth); best 350 c.c. sidecar, P. Cranmore (B.S.A.); best performance by a lady, Mrs. McLean (Douglas). The Club Team Prize was won by the British Two-Stroke Club's team, composed of Kershaw (James), Moxon (Francis-Barnett), and Shepherd (Scott). The most meritorious performance below Gold Medal standard was made by T. G. Meeten (172 c.c. Francis-Barnett and sidecar).

Of the makes with three or more entries, Ariels and Scotts were the only ones to finish complete with gold medal or silver cup awards.

A special word must be said as to Meeten's performance. In a trial such as the Scottish, it is creditable enough to get through on a 175 c.c. machine solo. Yet for over 1,000 miles Meeten's tiny Villiers engine dragged a sidecar and passenger, and never once failed on a hill due to lack of power. Moreover, his combination climbed the notorious Tomapress hill, six miles in length, at only a fraction under 20 m.p.h.—the speed required by the regulations for solo machines of 1,000 capacity.

THE GREAT TREK TO EDINBURGH

BY A COMPETITOR.

THE London to Edinburgh Reliability Trial, which is usually one of the most popular trials organised by the Motor Cycling Club, was not so well supported this year by motor cyclists, as the date on which it was run clashed with the "Sunbeam 200." However, the car enthusiasts were more numerous than ever, and in spite of having sent our entry in some time before they closed, we were well towards the end of the entries. On arriving at Wrotham Park, Barnet, with plenty of time to spare before we were due out, we decided to make a tour of inspection of the competing cars and to look up old friends who we had not seen for some time and who were also entered.



A. J. MOLLART (ACEDER) SNAPPED NEAR CARLISLE.

Having managed to get a "Gold" in each of the previous Exeter and Land's End runs, we decided to attempt to get "The triple award," and so we again condemned ourselves to that uninteresting long stretch of the Great North Road which had to be covered during the night.

On the day before the trial we had bad luck in that our petrol tank sprang a very bad leak, and so on our return from town in the evening we were obliged to set to work replacing the old tank with another odd one which we fortunately had by us. As usual, all sorts of difficulties cropped up to hinder our doing this easily, and it was 3 o'clock on Friday morning before the job was finished and we retired to bed for a few hours. We were naturally somewhat sleepy at the start and began to wonder how we would get on during the night, but after nearly emptying one of our thermos flasks of tea we felt much better and began to secure our numbers preparatory to starting. Before going any further I should say that "we" consisted of my passenger, Dan and myself.

THE START.

Five minutes before we were due to start we were told to get ready and queue up. The usual crowd of questions were hurled at us; what spirit are you using? what oil, etc., whilst we were waiting, and at last it was our turn to start, so letting in the clutch

we began "The Great Trek." The Edinburgh run this year appeared to attract the attention of the Public much more than usual, and a surprising number of people had gathered outside the gates of Wrotham Park to watch the competitors. In fact, all along the road far into the night little knots of enthusiasts were seen waiting for the cars to pass and cheering them on their way. Being competitors, we naturally did not see very much of what went on except in our near vicinity since we were obliged to run near our schedule, but we came across a few competitors who were unfortunate enough to have trouble.

The first check marked on the route card was at Biggleswade, but we did not have to sign here, so carried on. Just before Stamford we came across a competitor who had had the misfortune to break his crankshaft. Being rather late we did not have time to stop, but learnt what had happened to him on our arrival at Stamford. We were here entertained to coffee by members of the Stamford Club, who very kindly handed the welcome refreshments to us so as to save us the trouble of getting out of our cars. Twenty-one miles further on, just as we were beginning to feel very sleepy, at Grantham, we had a stop of one hour, and after signing on, went for a short walk to while away the time. Shortly before restarting we were presented with some "York" chocolate, which proved very welcome later on. This year we did not encounter any fog on this part of the journey, the night being perfect. Soon after passing Newark dawn began to break, and at Doncaster niore tea was very welcome. Between here and Ilkley we had great difficulty in keeping awake, and at last, after what seemed an eternity, we arrived at the breakfast stop. After having a good wash and large breakfast we felt thoroughly refreshed, and looked forward to restarting for the test hills with a light heart.

STAKE MOSS.

After leaving Ilkley the road becomes very narrow and winding and begins a steady ascent to the foot of Stake Moss. This hill was in very much better condition this year than last, and changing into second speed near the first bend we completed the climb on that gear. The descent of the grass-grown slope down from the summit of Stake Moss was very tricky, as the grass appeared to be very damp in places, and the majority of the cars skidded about quite a lot. The next of the test hills, Askrigg, was in poor condition near the summit, and though not a really steep hill, is a very long grinding climb. If we had not been obliged to keep to the 20 m.p.h. average we would have loved to have stopped around here to admire the scenery, but this was impossible as the roads were very difficult and narrow, so we had to keep going.

THE GREAT TREK TO EDINBURGH—continued.

At the foot of West Stonesdale we were held up for some time because some unfortunate competitor had succeeded in charging the bank near the second bend, and bent his front axle. Eventually our turn came, and starting off in second gear we approached the second bend. Our wheels began to spin rather badly just here, and owing to loss of speed we were obliged to change to first gear to round the hairpin, after which we changed up to second and completed the climb. From the top of West Stonesdale to the summit of Tan Hill, which, according to the route card is 1,732 ft. high, the road ascends steadily, and there are few engines which have much power in hand for the last little stretch just before the summit.

Passing the check on the summit, we turned sharp left and proceeded to gradually descend to Appleby, where there was another check, and this time we had to sign.

A WELCOME WASH.

The sun, which had been beating down on us steadily, now began to make itself really objectionable, and our faces started to get very sore. At Carlisle, where we were allowed an hour's stop, we had a very welcome wash at the Railway station, but we had great difficulty in drying our faces, they were so sunburned. However, once accomplished, they felt much better for it, and we again began to take an interest in things.

Leaving Carlisle we followed the Glasgow road, and after crossing the Tweed and going under the A.A. banner, welcoming us to Scotland, which was stretched across the road, we passed the famous Gretna Green Smithy. It certainly looked very attractive in its new coat of white paint, but there did not seem to be anything going on when we passed!

The next check was held at Moffat, and here we were allowed 14 minutes for tea and refreshments,

etc. The cars were parked in the Market Square, and whilst waiting for our turn to start we fell asleep, which fact probably accounted for our being several minutes late starting.

THE LAST STRETCH.

After leaving Moffat the route goes past the Devil's Beef Tub, and then follows the course of the Tweed from its source. This part of the route is probably as interesting as any, and we would have enjoyed it much more had we not got to make up time, which we managed to do before reaching the next check at Newbiggin corner. The road from here runs by the edge of Talla reservoir, and is extremely pretty. At the end of the reservoir is the last observed hill Talla Linn, though why the M.C.C. officials considered it stiff enough to be observed we cannot imagine. We heard later that there was not one failure on it, and that several competitors whilst climbing it shouted out to the numerous spectators "Where's the hill?" Leaving the summit the road is extremely narrow and winding, and we could not help wondering what would happen if some unfortunate individual happened to be motoring in the opposite direction! Fortunately, this did not happen and we eventually joined the main Edinburgh road 12 miles out.

Edinburgh itself was so crowded this year that in spite of allowing ourselves plenty of time to get from Liberton to Waverley Market House we were very nearly late, but just managed to check in dead on time. After removing our number plates we handed them in together with our claim for a "Gold," and having signed the time sheet, we finished what most people considered (ourselves included) to have been a most perfect trial, favoured throughout by beautiful weather.



LONDON EDINBURGH COMPETITORS LINED UP IN THE MARKET SQUARE AT MOFFAT.

CAPTAIN MALCOLM CAMPBELL'S WONDERFUL FEAT.

INNUMERABLE DIFFICULTIES OVERCOME.



ABOVE is a photograph of Captain Malcolm Campbell's record breaking car, "Bluebird," being pushed out preparatory to the start of his record breaking run at Verneuk Pan, South Africa, when he succeeded in breaking two world's records, e.g., the 5 miles record and the 5 kilometres record. His speeds for these distances were 212 m.p.h. and 211 m.p.h. respectively, and when taking these wonderful records into consideration it must be remembered that Bluebird's engine was supercharged and that the track where the record was made was 2,500 feet above sea level. The rarefied atmosphere at this height naturally decreases the horse power developed by an engine, and in spite of the air resistance decreasing also it is not proportional, and therefore, Captain Campbell's speeds, though very high, were probably not quite so high as they would have been had he attempted his record at sea-level. Also the surface of Verneuk Pan does not appear to be as good for record breaking purposes as one was at first led to believe, since it appears to be very easily broken up.

Captain Campbell's other difficulties must also be taken into consideration. Verneuk Pan is 450 miles from Cape Town by the shortest route, which con-

sists of few roads, but mostly difficult scrub country. Bluebird had to be transported over this, and for this purpose a Thornycroft six-wheeler was used. On arrival at the Pan Captain Campbell was faced with the problem of clearing a sufficiently good track for his record attempt, and for this purpose native labour had to be employed to sweep the track and make it clear of stones.

When all these difficulties are taken into consideration we have no doubt our readers will agree with us that Captain Campbell's was a truly wonderful effort.

"Attempts were made by two South African Motor Cyclists on April 26th last to break the World Record for the flying Kilometre on Verneuk Pan, the scene of Captain Malcolm Campbell's recent records.

J. W. du Toit riding a Brough Superior attained a maximum speed of 91 m.p.h. and a mean speed of 87 m.p.h., while S. Collins, riding an Ulster model Rudge Whitworth attained a maximum of 95 m.p.h. in one direction and a mean speed of 91 m.p.h. While these speeds do not break the existing World Records, Collins was successful in breaking the South African Kilometre Record."

THE SOUTHPORT MOTOR CLUB 100 MILE SAND RACE.

THE organisation of the Southport Motor Club seems to improve each year and the Hundred Mile Race which they held on May 18th last was a very successful and exciting event. The weather was beautiful and the sands were in perfect condition.

As usual the course of a mile and a third consisted of two long straights divided by a line of flags, with a hairpin turn at each end. The entrants, who were divided into five classes according to the cubic capacity of their engines, had to do thirty-five laps to complete the race.

Thirty cars started. They were lined up in three rows and all got away quickly as the flag dropped. T. Thistlethwaite's 7,000 c.c. supercharged Mercedes was the biggest car running and had gained the lead at the end of the first lap. He was closely followed by Raymond Mayes on his three litre Vauxhall Villers and Dan Higgin on one of the old four cylinder 200 mile race supercharged Talbots. After a few laps Higgin, who was cornering magnificently, took the lead, but, unfortunately for him, clutch trouble developed on the 13th lap and he was forced to retire. Mayes' Vauxhall, which had been misfiring, also retired and Thistlethwaite again took the lead and continued to hold it until the end. He was followed by three Bugattis driven by G. Lane Jones, J. Field and R. V. Fontes. Later on G. Lane Jones dropped out and there was quite an exciting duel between J. Fields and R. V. Fontes.

Three Austen Sevens driven by G. Poppe, S. V. Holbrook and P. Stevenson did exceedingly well and made wonderfully fast laps for such small cars. Stephenson indeed was at one time only three laps behind Thistlethwaite. He created a tremendous thrill by turning his car right over whilst cornering.

A.J.S. SUCCESSES IN AFRICA.

Riding a 2½ h.p. A.J.S. camshaft machine in the recent Durban-Johannesburg Race, Grant Lind came in first in the record time of 8 hours, 8 minutes, 19 seconds, breaking all previous records by 38 minutes, and maintaining an average speed of 49.43 m.p.h. Second place was secured by C. Juys, also riding a 2½ h.p. A.J.S. camshaft machine, his time being 8 hours, 44 minutes. Other A.J.S. riders secured eighth, ninth and thirteenth places.

The popularity of the race may be judged from the fact that over 20,000 spectators turned out to witness it.

J. H. SIMPSON.

Probably the most marked of all road racing motorcyclists is the redoubtable Jimmy Simpson, who has made innumerable record laps in the Isle of Man, but who has yet to win his first race. Simpson, so far,

In the most stoical manner he picked himself up and after righting his car he drove off again with only a few seconds delay. At first it seemed as though the upset had been quite a harmless one, but very soon bearing trouble due to oil leakage developed and he was forced to retire. G. Poppe eventually worked up into fifth place behind J. Darby who had been doing exceedingly well on a front wheel drive Alvis and came in fourth.

Great amusement was caused at the end of the race by the Aspden (Eldridge Special) which completed the third lap twenty-five minutes after the winner was flagged in.

The Results were as follows:—

1. T. Thistlethwaite	7,100 c.c. Mercedes
2. J. F. Field	1,996 c.c. Bugatti
3. R. V. Fontes	1,996 c.c. Bugatti
4. J. Davy	1,494 f.w.d. Alvis
5. G. Poppe	747 c.c. Austin
6. Earl Howe	2,300 c.c. Bugatti
7. C. J. P. Dodson	2,996 c.c. Sunbeam
8. J. H. Bartlett	1,087 c.c. Riley
9. J. Walker	1,496 c.c. Bugatti
10. N. de Larrinaga	1,087 c.c. Riley
11. D. Higgin	1,496 c.c. Talbot

CLASS RESULTS:—

750 C.C.—G. Poppe	747 c.c. Austin
1,100 C.C.—G. Poppe	747 c.c. Austin
N. de Larrinaga	1,087 c.c. Riley
J. H. Bartlett	1,087 c.c. Riley
1,500 C.C.—J. Davy	1,494 c.c. f.w.d. Alvis
G. Poppe	747 c.c. Austin
J. Walker	1,496 c.c. Bugatti
2000 C.C.—J. Field	1,996 c.c. Bugatti
R. V. Fontes	1,996 c.c. Bugatti
J. Davy	1,494 c.c. f.w.d. Alvis
Unlimited—T. Thistlethwaite	7,100 c.c. Mercedes
J. Field	1,996 c.c. Bugatti
R. V. Fontes	1,996 c.c. Bugatti

has been dogged by bad luck, but with a change of "stables"—he is now riding Nortons—his luck may change too.

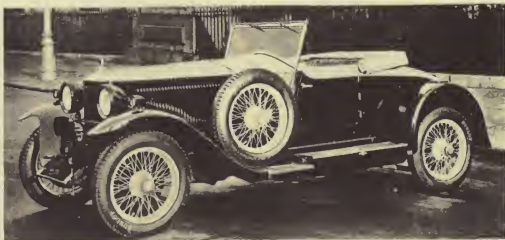
On his new mount he opened the season well at Southport recently. In the 100 mile races there, he won both the 600 c.c. and the unlimited classes on a 490 c.c. machine—a really remarkable performance when it is considered that in the big class the second man, on a machine of over double the size, was two miles behind. The lap measured 2.6 miles, and included two sharp turns. Until he established a handsome lead, Simpson lapped regularly in 2 min. 5 sec.—a speed of approximately 75 miles per hour.

On the same day Stanley Woods, another famous Norton exponent, won the "Athy 75"—a handicap race run off annually in Ireland. Starting from scratch, Woods ran through the big field of 47 riders and won by 38 seconds. His speed, over a tricky and dusty course, was 70 miles per hour.

SPORTING CARS ON TEST.

THE 4½ LITRE INVICTA.

By HUBERT H. S. KEOGH.



THE 4½ LITRE INVICTA TWO-SEATER HAS ATTRACTIVE AND SPEEDY LINES.

SPECIFICATION. 4½ LITRE INVICTA.

Engine.—Six Cylinder, bore 88.5 mm, stroke 120.64 mm, capacity 4,467.26 c.c., Treasury rating 29.12 h.p., tax £30, overhead valves operated by push rods.

Gearbox.—Four forward speeds and reverse, ratios: 11.3 to 1, 7.5 to 1, 5.2 to 1 and 3.9 to 1.

Suspension.—Semi-elliptic springs front and rear controlled by Hartford Duplex Shock Absorbers.

Brakes.—On all four wheels. Six sets of brake shoes, two on each of the rear wheels and one on each of the front wheels.

Lubrication by Enots Autoram gun.

Wheels.—Rudge Whitworth detachable wire wheels are fitted shod with 30 x 5.25 Dunlop tyres.

Chassis Weight.—25 cwts.

Electrical Equipment.—Rotax 12 volt. Exide twin starter batteries.

Accessories.—Clock, speedometer, radiator thermometer, cigarette lighter. Klaxon and Bosch horns. Full kit of tools.

Speeds on Gears:—

2nd, 45 m.p.h.

3rd, over 70 m.p.h.

4th, top, over 85 m.p.h.

according to
type of body, etc.

Price.—Chassis £985.

Manufacturers.—INVICTA CARS, LTD.,
11 Albermarle Street, W.1.

Though not sold as a super sports car, the 4½ Litre Invicta, with its exceptionally high performance, can hardly be classed as a touring car, yet it is probably one of the most ideal cars made for this purpose, owing to its wonderful top gear performance, but at the same time if full use is made of the gearbox and the car's terrific acceleration, there are few super sports cars which can equal its performance. It will accelerate from 10 miles per hour to 90 miles per hour in top gear in 33 seconds! and yet in spite of this, with a 3.9 to 1 top gear it will climb Netherall Gardens, Hampstead at 10 miles per hour with a rolling start of about 4 miles per hour in top!

This staggering performance is not due by any means to the fitting of a super efficient engine in a very light chassis, since the chassis weight, 25 cwts., is only slightly below the standard for a car of this size, and the car which we tested was fitted with a four door Weymann Saloon body, which brought the total weight up to 31 cwts.

105 H.P. AT 4,000 R.P.M.

The six cylinder monobloc engine has a bore of 88.5 mm and a stroke of 120.64 mm, which give a cubic capacity of 4,467 c.c. Its effective speed range is from about 200 r.p.m. to 4,000 r.p.m. when it develops 105 h.p. The crankcase, which is made of light alloy, is a stiff rigid casting, and acts as the engine frame. The valves, which are set in the detachable head are operated by push rods and fitted with duplex concentric valve springs. The sump is ribbed for cooling purposes. The crankshaft is mounted in four bearings and its journals are of extra large dimensions.

SPORTING CARS ON TEST—continued.

Twin ignition is fitted; coil and magneto, with of course two plugs per cylinder. The distributor and make and break are driven off the end of the generator and are very accessible. The generator, camshaft and magneto are chain driven.

Two carburettors are fitted and fed from an auto-vac tank which draws the petrol from the 12 gallon tank mounted at the rear. There is an auxiliary 2 gallon tank mounted in the scuttle which acts as a reserve and is gravity fed.

The gearbox has four forward speeds and reverse, and is fitted with right hand change. The steering mechanism is of marles design and the steering wheel is 17ins. in diameter.

Transmission is by means of an open propeller shaft to the back axle which is of the half floating spiral bevel driven type. Semi-elliptic springs are fitted front and rear. The brakes, six in number, are interconnected to the pedal which operates one set of shoes on each of the four wheels. The hand brake operates one set of shoes on each of the rear wheels only.

ON THE OPEN ROAD.

After climbing Netherall Gardens we proceeded to see what speed the car would attain and were amazed with the acceleration which the car has in top gear. When once the engine is sufficiently warm the throttle pedal can be suddenly depressed to the full when the car will immediately surge forward as if it is being pushed from behind. The car will accelerate from 10 m.p.h. to 60 m.p.h. in top gear in 15 seconds, and if third gear is employed this time can be reduced to 12½ seconds.

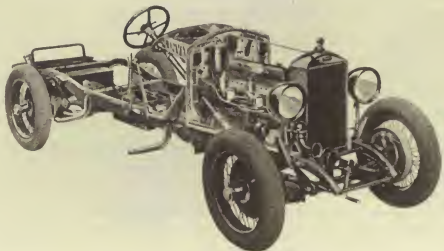
At 50-60 m.p.h. the engine is vibrationless and the transmission absolutely noiseless. On touching 70 m.p.h. for the first time the car developed slight steering wobble, but after having stopped and tightened up the front shock absorbers and steering

damper we had no further trouble on this score even when this speed was exceeded. The maximum speed attained shortly after was just over 80 m.p.h., more could easily have been accomplished had opportunity presented itself, but it was necessary to close the throttle while the engine was still picking up. At this speed the car held the road very well indeed, in fact, I had no idea we were doing anything like eighty. The suspension at all speeds is beyond criticism, and in spite of the saloon body very fast cornering can be indulged in. The silent gearbox permits a very fast slip change to be made without in any way stressing the transmission. There is no need to double declutch when changing either up or down. The lowest speed at which the car will run in top gear is 6 m.p.h. and this without transmission snatch or judder. There is no need whatever to use any gears except second and top since the car will go practically anywhere in top, including traffic, and if brought to a dead stop the most rapid acceleration can be obtained in second, and top gear can then be again engaged.

EXCELLENT BRAKES.

As one would expect on a car of this calibre, with such a good turn of speed the brakes are excellent. Though not servo operated, they are very easy to apply and are progressive in action. When applied to the full either on the straight or on curves there is not the slightest tendency for the car to deviate from its course. The handbrake which operates on the rear wheels only is really more for parking than anything else, but at the same time it is quite efficient. At all speeds the steering is very light and accurate, but the lock appeared to us to be on the small side for a car with such a short wheelbase.

The car which we tested had been used for some time for everyday road work, and this must be taken into consideration when its performance is considered.



THE 4½ LITRE INVICTA CHASSIS. NOTE THE NEAT LAYOUT.

SPORTING CARS ON TEST—continued.

FULL RANGE OF COACHWORK.

The manufacturers do not supply standard types of coachwork as they maintain that compromise bodies intended to suit all tastes will probably fail to satisfy any, which is quite true with a car of this description. The prospective purchaser can therefore obtain just

the type of body he wishes, the manufacturer's only stipulation in this respect being the weight, since they will give no guarantee with their normal chassis if the complete car weighs more than 31 cwt. The makers usual guarantee is for three years or 20,000 miles and the chassis costs £985.

THE SUPERCHARGED B.N.C.

AN INTERESTING FRENCH CAR WITH GUARANTEED SPEEDS.

THE B.N.C. light car, which has an excellent name in France, is a very good example of the sporting type of car so popular in that country. The supercharged semi-racing model is sold with a guaranteed speed of 103½ m.p.h., and, as the photograph shows is a well finished production. The four cylinder engine has a bore of 62 mm and a stroke of 90 mm, giving a total cubic capacity of 1,088 c.c. The engine which is rated at 8 h.p. gives 62 h.p. on the brake. A Solex carburettor is fitted and the supercharger is driven off the crankshaft at the forward end.

The Chassis appears to be much stronger than the average car of this type, and is no doubt built to stand the strain of long road races, such as the Le Mans 24 hours event. Transmission is by means of a three forward speed and reverse gearbox and an open propeller shaft. The brakes are servo operated Perrot type, and are interconnected and fully compensated.

The springing is by semi-elliptic springs both front and rear, and the axle is underslung and not fitted

with a differential. As a result the driving position is extremely low. The radiator is inclined, and by this means the makers claim more efficient cooling. It is mounted on silent block bearings so as to eliminate all vibration, etc.

Rudge Whitworth wire wheels are fitted and the spare is carried on the side of the body.

The unsupercharged model "Monza" type is fitted with a Ruby engine which is specially made for B.N.C.'s. Contrary to the usual Ruby practice this engine is fitted with a water pump. It was this model which won the 1927 Bol d'Or, and in 1928 the Le Mans 24 hour race, beating the worlds record for its class for the 24 hours and covering 2,270 Kilometres in that time. It is guaranteed to attain 78 miles per hour.

A very attractive range of bodywork is provided by the manufacturers whose address is:

AUTOMOBILES B.N.C.,
90 Rue Edouard-Vaillant,
Levallois-Perret,
France.

R.A.C. TOURIST TROPHY RACE.

The R.A.C. has now decided upon the arrangements in connection with the Grand Stand, Replenishment Pits, etc., for the Tourist Trophy Race in Ulster on 17th August next. The actual site will be the same as that used last year. It is only five miles from the heart of Belfast, it is served by a good communication road to the outside of the course, the tramway terminus at Dundonald is less than two miles distant, and it is convenient therefore for both spectators and competitors.

Last year the Stand was on the outside of the course and the view was somewhat restricted. It is proposed this year to place it on the other side of the road on the site occupied by the Scoring Board last year. It will be within fifteen feet of the road, and will command a view of the course where it approaches the Pits for more than half-a-mile. It will be covered, and will, if possible, also be covered in at the back.

The Replenishment Pits will occupy the same position as last year, and will thus face the Grand Stand. Behind the Pits will be the Scoring Boards, and the whole of the field on that side of the road will form an enclosure in which will be placed re-

freshment tents, post office, etc. The field at the rear of this enclosure will, as last year, be used as the official car park.

In addition to the above, the R.A.C. is endeavouring to make arrangements for a small private enclosure overlooking Quarry Corner having direct communication with the R.A.C. enclosure, so as to afford seat-holders in the Grand Stand and occupants of the enclosure, if they so desire, an opportunity of seeing the cars take this well-known corner.

A footbridge will be erected to enable seat-holders to pass from the Enclosure and car park to the Grand Stand at any time, and also visit the Quarry Corner enclosure.

It is anticipated that these new arrangements will give to spectators in the Grand Stand an excellent view of the cars travelling almost at their maximum speed over a considerable distance; it will enable them to follow the pit work in detail, the Scoring Boards will be immediately opposite to them, whilst loud speakers will keep them informed as to the progress of the race and of any incidents reported by the various marshals stationed around the course.

TWO SUPERCHARGED B.N.C. MODELS



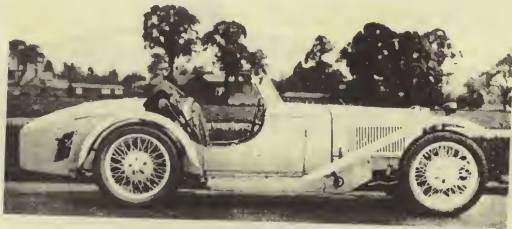
THE TWO-SEATER SPORTS BODY ON " MONTHLEBY " TYPE CHASSIS.



THE " MONTHLEBY " CHASSIS FITTED WITH A RACING BODY.

THE RILEY NINE BROOKLANDS SPEED MODEL

A FEW DETAILS ABOUT A VERY FASCINATING SUPER SPORTS CAR.



SHOWING EXTREMELY LOW BUILD OF THE RILEY SPEED MODEL.

BEING interested in discovering whether the modern super sports car which is being developed from racing practice was of any use for ordinary everyday road work we sought a trial run in what must be one of the most up-to-date sports cars on the road. As will be seen in the photograph on this page the Brooklands Model Riley Nine is to all intents and purposes a racing car, and it would be difficult without a demonstration run to convince the average sporting motorist, that in spite of having a high turn of speed, this car is as tractable and docile as many touring cars.

The body, which is made of metal throughout, is extremely comfortable and there is plenty of room for two "large" people. The carden shaft, in spite of passing above the floor level between the seats does not get in the way at all, in fact it seems to make the seating position more secure, and the gear change, which is controlled by probably the smallest gear lever in existence is delightfully easy and in combination with the close ratio gears permits of high average speeds being maintained. The suspension is extremely good at high speeds without being harsh at low speeds, contrary to the majority of sports cars of this description. The steering is light yet not by any means too light for the high speed of which the car is capable, in fact at all speeds it is beyond criticism.

SILENT RUNNING.

The most fascinating thing about this car is the silence and complete absence of fuss when it is cruising between 35-60 miles per hour. The exhaust at this speed is almost inaudible, and the engine vibrationless. Its performance on top gear is wonderful, and although it will not admittedly run very slowly on this gear yet it will climb most main road hills in an effortless manner. Fitzjohn's Avenue, Hampstead for instance, was climbed in its stride in top gear and no falling off of power was noticeable.

This on a 9 h.p. car capable of a comfortable 70 m.p.h. in third gear! As would be expected the car holds the road like the proverbial leech, and extremely fast cornering can be indulged in. The brakes, which are delightfully smooth in action were very efficient and appeared to be quite up to their work. The car is extremely easy to handle, and, owing to its remarkable acceleration, it soon threads its way through the thickest of traffic.

IDEAL CAR FOR SPORTSMEN.

As might be expected the Speed Model Riley is not very suitable for the average type of driver who wishes to carry a lot of luggage around with him and does not delight in gear changing, since naturally the car's performance is totally different when full use is made of the gears to when top only is used. But for the enthusiastic clubman who wishes to use his car for speed events and at the same time high speed touring we consider the car ideal.

With this object in view the manufacturers have studied the passenger's comfort as much as possible and the well fitting hood and screen give adequate weather protection. The spare wheel is carried right out of the way inside the tail where also are housed the two sets of batteries, one each side of the carden shaft. Adequate space is provided for tools under the passenger's feet, and the two very wide doors give easy access to the well upholstered seats.

Owing to the many individual requirements the manufacturers now list this car in two forms, e.g., Fully equipped and stripped at £420 and £395 respectively and with a guaranteed road speed of 80 miles per hour, we consider it very good value for money. When it is remembered that one of these cars in touring trim won the Ulster T.T. last year (1,100 c.c.) and also finished second in the 1,100 c.c. of the Junior Car Club's 24 hour race at Brooklands last month we have no doubt our readers will agree that this car combines reliability with speed.

THE NASH ADVANCED SIX ON THE ROAD.

AN AMERICAN PRODUCTION WITH HIGH EFFICIENCY ENGINE.



THE NASH ADVANCED SIX PHAETON.

THE 28.9 h.p. Nash Advanced Six, though admittedly not a sports car, deserves some mention in the pages of this Journal in that its engine is of such advanced design.

The six cylinder engine has a bore and stroke of 88 mm x 127 mm respectively, giving a cubic capacity of 4,600 c.c. with an R.A.C. rating of 28.9 h.p. The seven bearing crankshaft is fitted with hollow crankpins and has a Torsional Vibration damper at the front end. The Bohnalite aluminium alloy pistons are fitted with a steel Invar strut, which controls the contraction and expansion of the aluminium piston, thus maintaining correct clearances between piston and cylinder wall at all temperatures. The twin ignition is supplied by two coils with a single double distributor and two sets of points. This feature coupled with the high compression ratio, no doubt accounts in no small measure for the car's good performance. The overhead valves are operated by push rods and the two sparking plugs per cylinder are mounted one on each side of the cylinder head. The three forward speed and reverse gear box and clutch are built in unit with the engine, the drive to the rear axle being by means of an open propeller shaft.

The steering is delightfully easy at all speeds and ample lock is provided. The braking system consists of external contracting bands on the rear wheels with internal expanding shoes on the front. The hand brake operates on the transmission shaft. The rear springing is by means of semi-elliptic springs as also the front.

GOOD PERFORMANCE.

One of the most interesting facts about the particular car we tested, which was fitted with a saloon body, was, that it already had over 11,000 miles to its credit, so that in addition to being well run in, the car was able to demonstrate its durability and wearing qualities. The first thing that impressed itself upon us on taking over the wheel was the car's extraordinary performance in top gear. On this gear it is possible to crawl along in traffic at 4 m.p.h., and when opportunity presents itself to accelerate away

without transmission snatch or judder by simply depressing the throttle. The maximum speed obtained by this particular car fitted with a four door saloon body was 74 m.p.h., but this could have been exceeded had opportunity presented itself. At this speed the springing was all that could be desired for a car of this class, as also was the steering. The action of the brakes was very efficient.

Due, no doubt, to the well balanced crankshaft, engine vibration was particularly unobtrusive at all speeds, and at 50 to 60 m.p.h. the only noticeable noise was a slight whistle caused by the wind.

EASY GEARCHANGE.

The gear change was particularly easy, both up and down, and all the controls come easily to hand. We did not have an opportunity of finding out the car's maximum speed on the indirect gears, but consider that the car's performance is well above that of the average American production of this horse-power. Certainly the makers claim that their engine, when fitted with twin ignition, develops 15 per cent. more power, is no idle boast, which fact will be brought to anyone's notice if they have a trial run in this car.

There are several different types of bodywork to choose from, and a full display of these cars will be found at the Nash showrooms in St. John's Wood.

Altogether a very comfortable smooth running car with a surprising turn of speed and very reasonably priced with a four door saloon body at £590, or with open body as illustrated, £575.



THE NASH ADVANCED SIX SALOON.

SHELSLEY WALSH

B. H. DAVENPORT EQUALS HIS OWN RECORD FOR THE HILL

THE annual classic hill-climb at Shelsley Walsh on May 4th, was this year supported by a record entry, and attended by record crowd of spectators. There were few lulls in the proceedings, and altogether it was a very enjoyable afternoon.

The hill, which is in private grounds, has a maximum gradient of 1 in 6 and is 1,100 yards in length. There are two bends on the lower slopes of the hill followed by an S bend near the top, which all combine to make the climb extremely tricky.

The first man up was H. J. Bertram on a 30-98 h.p. Vauxhall, who made a neat climb. Basil Eyston on a 15-85 supercharged Alfa Romeo was disappointing, whereas W. E. Harker on a supercharged Austin 7 made a very fast ascent. R. B. Durose on an un-supercharged car of the same make made a good steady climb. C. R. Whitcroft's Brooklands Riley 9 appeared to be slightly too high geared, but B. Eyston driving another car of the same make made an excellent climb. J. Allan Arnold on a 1½ litre supercharged Lea-Francis skidded rather badly on the S bend, but was extremely fast. E. Thomas on another Lea Francis did well and G. Summers on a 15-85 h.p. supercharged Alfa Romeo was very fast. W. D. Phillips on a 2 litre straight eight Bugatti tore up the hill, slithered round the S bend, and with a whine from his exhaust rushed on to the summit. E. R. H. Hill on a 2 litre Diatto, though much slower than the Bugatti, made a very good climb. Miss E. V. Watson, on a 12-50 h.p. Alvis, made an extremely good climb, her cornering being very neat. G. Fairrie on a 2 litre Bugatti was very fast and cornered very well, as also did K. Dobson on a 4½ litre Bentley.

So much for the touring and sports classes, now for the racing car class.

B. H. Davenport driving his twin cylinder 1,500 c.c. Frazer Nash "Spider," being last year's winner, was first up. His speed was terrific, but in spite of magnificent driving. He just failed to equal his own record of last year by one-fifth of a second. His cornering appeared to us to be faster than ever and his car appeared to hold the road better. Raymond Mays' driving his supercharged 3 litre Vauxhall Villiers Special made second fastest time of the day, his driving being excellent, but his cornering appeared to be slower than usual. B. Cooke's Austin Seven made a very neat climb, and H. C. Jones on a 10 h.p. Avon Jap was very fast.

RESULTS:—

EVENT 1.

Team Event.	Midland A.C.	172.2 secs	
1. G. Fairrie	2,000 c.c. Bugatti
2. R. Hughes	30-98 Vauxhall
3. E. Hall	30-98 Vauxhall
S.U.N.B.A.C.	
1. H. F. Clay	33-180 Mercedes
2. F. Clifton	12-50 Alvis
3. F. G. Hunt	30-98 Vauxhall

Cambridge University M.C.			
1. H. Bertram	.. .. .	..	30-98 Vauxhall
2. S. R. Cooke	.. .. .	..
3. W. Y. Craig	.. .. .	..

EVENT 2.

Class 1 up to 750 c.c.			
5 Posts	secs.	Touring	secs.
1. R. Durose (Austin)	79.4	1. W. Grindley (Austin)	87.4
2. S. Priestly (Austin)	80.2	2. S. G. Orford (Austin)	92.6
3. H. Mander (Austin)	81.4	3. G. Wootton (Austin)	110.8
Class 2 up to 1100 c.c.			
1. B. Eyston (Riley)	65.6	1. J. Jeavons (Morris)	88.6
2. C. Whitcroft (Riley)	67.8	2. H. Robertson (Triumph)	117.2
3. S. Attenborough (Salmon)	68		

Class 3 up to 1500 c.c.			
1. J. A. Arnold (Lea Francis)	55.2	1. Miss E. Watson (Alvis)	67.6
2. E. Thomas (Lea Francis)	56.6	2. Miss Pink (Alvis)	70.6
3. G. Summers (Alfa Romeo)	58	3. K. Blackburn (Frazer Nash)	72.6
Class 4 up to 2000 c.c.			
1. W. Phillips (Bugatti)	55.4	1. F. Clifton (Alvis)	73.8
2. H. Hill (Diatto)	67	2. F. Platt (Alvis)	79.5
3. C. Seely (Morris Oxford)	73.6	3. S. Bass (Alvis)	85.4

Class 5 up to 2500 c.c.			
1. G. Fairrie (Bugatti)	56.4		
2. M. Parr (Delage)	87.4		
3. C. Merrall (Delage)	114.2		
Class 6 over 2500 c.c.			
1. G. Hunt (Vauxhall)	57.4	1. G. Hunt (Vauxhall)	57.4
2. R. Hall (Vauxhall)	57.8	3. R. Hall (Vauxhall)	57.8
R. Hughes (Vauxhall)			
3. H. F. Clay (Mercedes)	63.8	3. D. Small (Diatto)	65.2

EVENT 3.

Racing Cars of unlimited c.c.			
1. *B. H. Davenport (Frazer Nash)	.. .. .	..	46.4 secs.
2. Raymond Mays (Vauxhall Villiers)	.. .. .	..	47.8 secs.
3. H. Lones (Avon Y.A.P.)	.. .. .	..	51.8 secs.

* Fastest time of the day.

J. R. COBB BREAKS MORE RECORDS AT BROOKLANDS.

Driving a 12 cylinder 10680 c.c. Delage car at Brooklands on Tuesday morning, May 28th, Mr. J. R. Cobb succeeded in breaking three International Class A. records. These were the 50 kilometres, 50 miles, and 100 kilometres records, all of which were made from a standing start. His speeds were:—50 kilometres at 119.78; 50 miles at 119.42; and the 100 kilometres at 119.04 m.p.h. Mr. Cobb now holds seven International and British records in Class A. with the same Delage Car, having captured the British 5 kilometre record and the 5 mile, 10 kilometre and 10 mile International records at Brooklands little more than a month before. Mr. Cobb's new records previously stood to the credit of M. Garfield, whose speeds for the distances, driving a 45 h.p. Renault car at Monthey track in 1926, were 50 kilometres at 116.51 m.p.h., 50 miles at 117.14; and 100 kilometres at 117.36 m.p.h.

THE B.A.R.C. WHITSUN MEETING.

THE B.A.R.C. Whitsun meeting was held under ideal weather conditions, and the racing was very interesting in parts, like the proverbial curates egg. Kaye Don distinguished himself by winning two firsts and two thirds, and by breaking the standard lap record. He gave the spectators a wonderful demonstration of fast and excellent driving, whilst Mrs. Scott in the ladies Handicap proved herself to be one of our most skilful lady drivers.

There were nine events altogether. The forty-eighth 75 m.p.h. Short Handicap was won by J. S. H. Wilson on an Austin Seven at 73.92 m.p.h. The little Austin Seven behaved in a most sturdy fashion and led at the start, but was overtaken by E. E. Marsh on a Riley, who actually got home first but was disqualified because his silencer did not conform with the B.A.R.C. regulations.

Kaye Don won the forty-fifth lightening Short Handicap on the 12 cylinder 4 litre Sunbeam at a speed of 113.62 m.p.h. Another car of this make, driven by E. L. Bouts won the Thirty-fifth 90 m.p.h. Short Handicap. He started scratch but got into third place and steadily increasing speed got into a good stride and passed Marendaz on a Marendaz Special and R. C. Stewart on a Bugatti.

The race for the Brooklands Gold Vase was very exciting and finished well. C. D. Wallbank driving the old 15 litre Lorraine-Deitch made a splendid start but was shortly afterwards left by Jack Dunfee, J. R. Cobb, and Kaye Don. The latter came in first winning the race at a speed of 113.29 m.p.h.

In the Ladies Handicap Miss W. B. Burnett appeared to have an easy win, but was ultimately disqualified for starting too soon, and the first place went to Mrs. W. B. Scott who was driving a Grand Prix Delage in excellent style. R. C. Stewart won the Fifty-ninth 100 m.p.h. Long Handicap on a Bugatti. He did not have much difficulty in maintaining the lead once he had passed D. M. K. Marendaz on a Graham-Paige, and A. V. Wilkinson on an O.M. E. L. Bouts finished second on his Sunbeam, but he was a good distance behind the winner, and Kaye Don catching up the others at a terrific speed came in third.

A Brooklands Speed Model Riley driven by C. R. Whitcroft took the laurels for the Forty-seventh 75 m.p.h. Long Handicap. This car really moved and gained a good lead from J. S. Wilson, who had been travelling ahead on his Austin. Whitcroft roared ahead and finally finished the race half a lap in front. B. H. Wood on a six-cylinder supercharged Amilcar came in third.

In the Forty-fifth Lightening Long Handicap Kaye Don broke the standing lap record by averaging up by the late J. G. P. Thomas. In this same race he 115.29 m.p.h., thus beating the record of 110.19 set also equalled his own flying lap record of 132.46 m.p.h., a remarkably fine afternoon's work. There

were only five runners in this race but all the cars showed up well, especially the Delage driven at a terrific pace by J. R. Cobb, and of course the 4 litre Sunbeam masterfully handled by Kaye Don.

The Thirty-fifth 90 m.p.h. Kong Handicap seemed a bit flat after the exhilarating speed of the previous race, which was won at 121.81 m.p.h. Jack Dunfee was again taking part, but this time on a three litre Ballot. R. Grant on a Bugatti gave us all a false scent, this car was extremely slow at the beginning but soon got going at a good pace, when lo and behold, just as we were considering him a sure winner, fell out coming in last. Jack Dunfee had a quite easy win from A. H. Beadle on a 3 litre Bentley.

RESULTS:—

The Forty-eighth 75 m.p.h. Short Handicap.

1. J. S. H. Wilson (749, c.c. Austin), 1 min. 35 secs. (Speed 73.92 m.p.h.)
2. H. C. Spero (749, c.c. Austin), 1 min. 14 secs.
3. R. C. Stewart (1,496, c.c. Bugatti), scratch.

The Forty-fifth Lightening Short Handicap.

1. Kaye Don (3,976, c.c. Sunbeam), scratch. (Speed 113.62 m.p.h.)
2. D. Froy (5,954, c.c. Delage), 10 secs.
3. W. B. Scott (1,486, c.c. Delage), 18 secs.

The Thirty-fifth 90 m.p.h. Short Handicap.

1. E. L. Bouts (4,914, c.c. Sunbeam), scratch. (Speed 103.1 m.p.h.)
2. R. C. Stewart (1,496, c.c. Bugatti), 5 secs.
3. D. M. K. Marendaz (1,496, c.c. Marendaz Special), 1 m. 14 s.

The Brooklands Gold Vase.

1. Kaye Don (1,988, c.c. Sunbeam), 7 secs. (Speed 113.29 m.p.h.)
2. Jack Dunfee (1,988, c.c. Sunbeam), 7 secs.
3. J. R. Cobb (10,680, c.c. Delage), scratch.

The Ladies Handicap.

1. Mrs. W. B. Scott (1,486, c.c. Delage), scratch. (Speed 103.55 m.p.h.)
2. Mrs. W. U. Dykes (1,496, c.c. Alvis), 48 secs.
3. Mrs. W. H. Rigg (1,083, c.c. Lombard), 1 min. 35 secs.

The Fifty-ninth 100 m.p.h. Long Handicap.

1. R. C. Stewart (1,496, c.c. Bugatti), 34 secs. (Speed 103.61 m.p.h.)
2. E. L. Bouts (4,914, c.c. Sunbeam), 22 secs.
3. Kaye Don (1,988, c.c. Sunbeam), owes 12 secs.

The Forty-seventh 75 m.p.h. Long Handicap.

1. C. R. Whitcroft (1,083, c.c. Riley), 48 secs. (Speed 86.3 m.p.h.)
2. J. S. H. Wilson (749, c.c. Austin), 1 min. 15 secs.
3. B. H. Wood (1,093, c.c. Amilcar), scratch.

The Forty-fifth Lightening Long Handicap.

1. J. R. Cobb (10,680, c.c. Delage), 4 secs. (Speed 121.81 m.p.h.)
2. D. Froy (5,954, c.c. Delage), 14 secs.
3. Kaye Don (3,976, Sunbeam), owes 10 secs.

The Thirty-fifth 90 m.p.h. Long Handicap.

1. Jack Dunfee (2,976, c.c. Ballot), scratch. (Speed 92.43 m.p.h.)
2. A. H. Beadle (2,996, c.c. Bentley), 26 secs.
3. D. M. K. Marendaz (4,634, c.c. Graham-Paige), 46 secs.

NOVEL OILING SYSTEM ON RUDGE T.T. MACHINES.

THE Rudge T.T. Machines this year will have dry-sump lubrication of quite a novel order.

A worm driven double-acting pump working vertically in a pair of bushes in the timing case draws oil from a saddle pillar tank and delivers it *via* the main shaft through a hole drilled in the off-side fly-wheel to the big-end. In order not to weaken the crankpin the usual practice of drilling it has not been adopted, but instead the oil finds its way to the bearing surfaces through a groove cut on the circumference of the pin. A by-pass takes about one-sixth of the oil supply and delivers it to the rear cylinder wall. A scraper at the back of the crankcase removes the oil from the flywheel and drops it into a sump situated below and behind the crankcase, from whence it is drawn up through a channel in the wall of the crankcase and through the timing case to the top end of the sump. It is thence discharged back into the oil tank. The whole assembly is extremely neat, and at a casual glance it is difficult to distinguish the T.T. system from the standard, as there are only three external pipes, and the appearance of the timing case has hardly been altered. In addition, the fact that the sump is situated at the rear of the crankcase has not necessitated any sacrifice of ground clearance.

FOREIGN TOURING.

As a result of arrangements made with the authorities concerned, the R.A.C. is now in a position to issue Customs papers to Members and Associate Members touring abroad for the following 31 countries:—Austria, Belgium, Bulgaria, Brazil, Czechoslovakia, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Holland, Hungary, Irish Free State, Italy, Latvia, Lithuania, Luxembourg, Morocco, Norway, Poland, Portugal, Rumania, South Africa, Spain, Sweden, Switzerland, Syria, Tunisia, and Yugo-Slavia.

A scheme is also in operation whereby in the event of a car or motor cycle breaking down and spare parts being required, these can be forwarded through the Club on receipt of a cable stating what is required. These and the other facilities offered by the R.A.C. are undoubtedly most valuable to motorists touring abroad, and are to a large extent the cause of the rapid growth in foreign touring during recent years.

THE 200-MILE SIDECAR RACE.

Since the Sidecar T.T. in the Isle of Man has been discontinued, the only important long-distance event for combinations is the Brooklands 200 miles sidecar race. This was contested recently, and the results were illuminating.

The race demonstrated, for one thing, the superiority of single-cylinder machines, each class—350, 600, and 1,000 c.c.—being won by a "single." The 360 c.c. class provided the closest finish ever known in a long distance Brooklands event, for Hicks, the Velocette expert, won by 2/5th sec. only.

The general design of the T.T. machines will follow closely on the lines of the standard Ulster model. The wheelbase has, however, been lengthened by 1 1/4 inches. All the well-known features will be retained, including the four overhead valves, four speed gear, and interconnected brakes. Gear operation has been entirely altered, the control being by foot throughout. Every time the double pedal is pressed forward a higher gear is engaged, while a backward pressure engages the lower gears. In the brakes also there has been a slight change, for duralumin anchor plates have replaced the usual steel plates.

A "Y" alloy slipper piston will be used, giving a compression ratio of 7 1/4 to 1, and there has been a change in the cylinder design, in that the base is held to the crank case by six studs passing through a remarkably heavy circular flange. Following Ulster model practice, the drive side of the crank case is heavily webbed, and contains both roller and ball races for the crankshaft. There is also a roller race on the timing side, and the big end contains a caged bearing with long rollers of 1 1/2 in. diameter. Shock absorber details have not yet been finally settled, but the steering damper will be controlled by a hand lever.

Nortons won the 600 c.c. class. Three of this make started and they finished first, second and third.

ALDERSHOT COMMAND MANOEUVRES.

Military training operations will take place during the period, August 19th to September 4th, in the area, the boundaries of which are approximately the roads connecting the following places:—Aldershot, Farnham, Odiham, Alton, Greatham, Bordon. These operations will entail the movement of large bodies of troops and transport, and the R.A.C. therefore warns motorists that there will be considerable impediment to normal traffic. In order to minimise the inconvenience to the general public, however, the R.A.C. is arranging for a special staff of Road Guides to be in attendance to give warning of the presence of troops and material on the roads, to indicate alternative routes and to place caution signs wherever required. Further details regarding the particular roads likely to be affected will be issued by the R.A.C. later.

CAR PARKING AT THE NORTH-EAST COAST EXHIBITION

The R.A.C. is responsible for the car parking at the North East Coast Exhibition, which is being held in Newcastle-upon-Tyne and which will remain open until October next. The R.A.C. Car Park, which is situate in the Exhibition Grounds in a position almost adjoining the main entrance accommodated over 10,000 vehicles during last month, the charges being 1/- for a car and 6d. for a motor cycle.

INTERESTING BRAKE TESTING PLANT.

It is probable that no device yet known contributes towards the safety of motoring as much as one which has just been installed at the Hillman works. This consists of a brake testing plant which is now in operation at the end of the finishing line.

Every motorist appreciates the danger of ill-adjusted brakes. This may not be apparent in dry weather, but the moment the roads become wet sudden braking will cause the car to swerve sideways, skid and possibly crash into the very person or object which the driver was attempting to avoid.

Accurate adjustment of brakes is not easy to accomplish by hand. In fact, it is told of this new brake test that when a car, the brakes of which had been carefully adjusted by hand was placed on it, it recorded a difference of 100 lbs. pressure on the two rear wheels. This, of course, would be more than enough to cause a skid with certain road conditions.

All such possibilities are prevented by the new test at the Hillman works, which is, incidentally, the first of its kind to be employed by a British motorcar

manufacturer. At the end of the finishing line, the car is placed on the braking plant, with each wheel in contact with a pair of rollers. These rollers are revolved under electric power and the car wheels, of course, turn with them.

Each of the four devices has a dial, which records brake pressure in pounds. First there is a test for "drag;" then the hand-brake is applied and the brakes are adjusted so that there is exactly 300 lbs. pressure on each of the rear wheels. The foot brake pedal is operated by a graduated rod and, in the same way, adjustments are made so that each front brake records 400 lbs. and each rear brake 300.

The whole test occupies some 17 minutes, and at its conclusion the brakes have been thoroughly bedded down and adjusted to scientific requirements. The superiority of this to the hit-or-miss methods of hand adjustment is obvious. The Hillman Company is to be congratulated on being the first British concern to instal this somewhat expensive apparatus, and to pass on its benefits to Hillman owners in the form of even increased safety.

SCHNEIDER TROPHY.

This great Air Race will this year be held in England at the Solent. Members of the Royal Air Force Team are in Training at Felixstowe, and very encouraging reports have been received as to their progress. France will be competing this year, and has entered three machines, which we hear are capable of great speeds. An eight cylinder engine developing 1,200 h.p. is being made by a French Aero Engine concern for the Race. Portsmouth is arranging a Grand Navy Week, so that visitors to the Schneider Trophy may also have an opportunity of inspecting our latest battle ships and sea-planes.

R.A.C. PERMITS.

The R. A. C. has issued the following Permits:—

- June.
- 15-16—Reliability Trial—Carshalton M.C.C.
 - 19—Reliability Trial—Shirley and Dist. M.C.
 - 23—Reliability Trial—Liverpool M.C.
 - 30—Reliability Trial—North Manchester M.C.
 - 29-30—Reliability Trial—Kirkburton M.C.C.
 - 30—Middlesbrough and District M.C.
- July.
- 9-12—Land's End-John O'Groats Run—M.C.C.
 - 13—Speed Trial (Lewes)—Kent and Sussex L.C.C.
 - 14—Reliability Trial—Oxton M.C.
 - 6-7—Reliability Trial—Grantham and District M.C.C. and L.C.C.
 - 13—Hill Climb—Langford and District L.C.C.
 - 13-14—Reliability Trial—Oozelum & Woking M.C.
- August.
- 2-3—London-Barnstaple Trial—Surbiton M.C.

TRIUMPH SUCCESS IN RUMANIA

One of the outstanding events promoted annually by the Rumanian Motor Club is the hill-racing at Sinaia, which has just taken place over a mountain course on Mount Paduchiosu, and year by year this meeting increases in importance and popularity.

Mr. M. Moraru of Bucharest riding a 3-48 h.p. Triumph was the winner in the 350 c.c. class, and in the 500 c.c. event he repeated his splendid performance by finishing first. He made the best time of the day, lowered the previous record by 13 seconds, and was awarded the "Ing Enescu" Cup.

"Six Rudge-Whitworth machines were entered in the recent Eifel Race over the Nurburgring Circuit in Germany, gaining 1 First, 2 Seconds, 1 Third, 2 Fourths, and Fastest Time of the Day."

KAYE DON BREAKS MORE RECORDS

Driving his two-litre supercharged 6 cylinder Grand Prix Sunbeam at Brooklands on May 30th, Mr. Kaye Don succeeded in breaking the following International Records in Class E, from a flying start. He covered 5 kilometres at 126.08, 5 miles at 125.78; and 10 kilometres at 125.74 m.p.h.

The 5 mile and 10 kilometres records were previously held by Mr. J. Dunfee on a Sunbeam at 122.95 m.p.h. and 122 m.p.h. respectively.

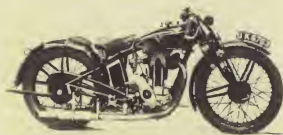
Mr. E. A. D. Eldridge previously held the 5 kilometre record on his straight eight 2 litre Miller at 125.5 m.p.h.

THE INTERNATIONAL TOURIST TROPHY RACES.

By R.R.

THREE T.T. Races will be held in the Isle of Man this year, the Lightweight, the Junior, and the Senior. Run under the International rules of the F.I.C.M. and the general competition rules of the A.C.U.

The official awards are £20, and a replica of the trophy to the driver of each winning motor cycle, and £10 and £5 to the drivers of the second and third motor cycles, in each race. A replica of the Trophy will be presented to the entrant of all motor cycles completing the course in a time not exceeding that of the winners in each race by more than one-tenth. Additional prizes will also be given as follows:—



THE SUNBEAM TO BE RIDDEN BY ALEC BENNETT.

"The Manufacturers Team Prize" consisting of the Union's Silver Exhibition Medal for the Lightweight, and a Challenge Trophy and £5 to each member of the winning team in the Senior and Junior Races. These team prizes are being awarded to teams of three competitors driving the same motor cycles, nominated and entered by the manufacturers of the machines. Winning teams will be those who complete the course in the shortest aggregate time, but the aggregate time taken by any member of a team must not exceed by more than one hour the time taken by the winner of the race.

A Club Team Prize to affiliated Club Teams in each race and the "Visitors" Cup will be presented for the best performance in the races by a visitor to the British Isles.

IMPORTANT REGULATIONS.

The T.T. Races are open to all motor Cyclists, but accepted entrants must have completed at least four laps of the actual course in practice, one lap to be covered in 45 minutes or less. Entrants have also to comply with a number of strictly enforced rules, such as specifying before the race, the brand of Fuel and Oil they propose using. During the races, each Competitor is allowed a replenishment Depot, but at no other place on the course are drivers permitted to obtain supplies. Actual spare parts must be carried on the motor cycles from the commencement of the races. Fuel and oil may only be carried in the usual tank or tanks on the machines. At replenishment depots, drivers only are permitted to carry out adjustments or repairs, although they are allowed one assistant to aid them in filling with oil, fuel and water.

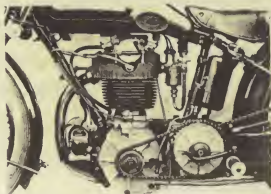
HISTORY OF THE RACES.

The Tourist Trophy Races were first held in the Isle of Man in 1907, and consisted of two races, Single Cylinder Class and Twin Cylinder Class. The former was won by C. R. Collier on a 3½ h.p. Matchless, and the latter by H. R. Fowler on a 5 h.p. Norton. Their speeds were 38.23 m.p.h. and 36.22 m.p.h. respectively. In 1908, the same two races were held and won by J. Marshall on a 3½ h.p. Triumph, and W. Reed on a 5 h.p. Dot. In 1909, only one race was held which H. A. Collier won riding a 5 h.p. Matchless at 49 m.p.h. C. R. Collier won the only race held in 1910 at 50.63 m.p.h. The Junior and Senior races were first instituted in 1911 and the Lightweight Race in 1922. In 1923 a sidecar race was also held, being won by F. W. Dixon on a 5.96 Douglas at 53.15 m.p.h. Five T.T. Races took place in 1925 in addition to the usual Senior and Junior. An Ultra Lightweight Race was run and a Sidecar Race. The last two races have not been held since the former was won by W. L. Handley on a 1.74 Rex Acme at the astonishing speed of 53.45 m.p.h.

In 1928, the Lightweight, Junior, and Senior Races were held. The Junior being won by A. Bennett on a 3.48 Velocette at 68.65 m.p.h. F. A. Longman on a 2.49 O.K. Supreme won the Lightweight at 62.90 m.p.h., and C. J. P. Dodson riding a 493 Sunbeam, carried off the Senior at 62.98 m.p.h. The poorness of Dodson's speed is accounted for by the very unfavourable weather conditions; mist and rain marred the race throughout.

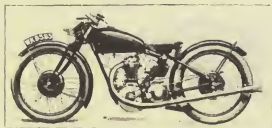
THE 1929 RACES.

This year the three Races will be held on the following dates, Senior, June 14th; Junior, June 10th; and the Lightweight on June 12th. The Races will all be run over a course starting from near Douglas thence via Ballacraigne, Kirkmichael, Ballough, Sulby and Ramsey over Snaefell Mountain, back to the starting point. One lap measures 37 miles, 1,300 yards. As each Race will consist of seven laps of the course, the total distance to be covered in each race is 264 miles, 300 yards.



SHOWING OILING SYSTEM, ETC., OF THE T.T. A.J.S

THE INTERNATIONAL TOURIST TROPHY RACES—continued.



THE RUDGE IN ITS T.T. FORM.

THE SENIOR.

A. Bennett will this year be riding a $3\frac{1}{2}$ h.p. Sunbeam which is practically the same as the model 90 Sunbeam. We fully anticipate that this famous rider, who has already won five T. T. Races will be the winner this year. C. J. P. Dodson, who won the Senior last year will also be competing in the race on a Sunbeam and will certainly put up a good performance. Five Rudge-Whitworth Machines have this year been entered, and with luck there is no doubt that Graham Walker should win a place in the first three finishers. It will be remembered that the last time a Rudge won a T. T. Race was in 1914, when C. G. Pullen on a $3\frac{1}{2}$ h.p. machine completed the course at an average speed of 49.47 m.p.h. Rudge-Whitworth deserve to win, but their riders will find it difficult to beat the Sunbeam quartette. Walter Denny, who is riding a Rudge this year has been driven in three previous T.T.'s in Freddie Dixon's Sidecar, but has never before driven in one of the races. Norton's have Jimmy Simpson riding for them this year, and he should secure a place in the first three. He has raced in many previous T.T.'s and made innumerable lap records, but has never won a T. T. Tommy Spann, who is riding a Norton and D. Lamb, also on a similar make, are sure to put in some fast work and will be close on the heels of the winners.

THE JUNIOR RACE.

Four Sunbeams are entered for the Junior, C. J. P. Dodson, F. Franconi, and A. Simcock are also riding in the Senior. We expect that the Velocettes, ridden by F. G. Hicks and H. J. Willis, will be well to the front in this race. S. Woods is riding a Norton this year, and should win on form. He has already

carried off two T.T.'s, and his last win in 1926 showed that he can move. His speed was 67.54 m.p.h., riding a Norton in the Senior.

THE LIGHTWEIGHT RACE.

In this race we have K. Twemlow riding a Dot. He will certainly do well. It will be remembered he won the Junior in 1924 on a New Imperial at 55.67 m.p.h. G. E. Himing, who is riding a Zenith, is sure to give Twemlow a good race, and should secure a place. Peitro Gherri (Guzzi) is riding again, and will put up a good performance, and add to the interest taken in this race.

SPEEDS ANTICIPATED.

The speeds at which the three races will be won depend largely on the weather conditions. The



A CLOSE UP OF THE 493 C.C. SUNBEAM T.T. ENGINE.



THE 495 C.C. A.J.S. T.T. MACHINE.

Lightweight was won in 1927 by W. L. Handley, on a 2.48 Rex Acme, at 63.30 m.p.h., but last year F. A. Longman, on a 2.490 K. Supreme, only averaged 62.30 m.p.h. The average should reach 65 m.p.h. this year, given ideal conditions.

The Junior Winner this year will have to average a good 70 m.p.h., and in the Senior, we look to an even greater speed being achieved, probably 72 m.p.h. As far as lap records are concerned, A. Bennett this year made the fastest lap on record at 70.28 m.p.h. The Record lap this year will have to be in the region of 73 m.p.h. if the average speeds we anticipate are secured.

RACING NEWS.



PROVISION ENTRIES SENIOR T.T. RACE, 1929.

<i>Entrant</i>	<i>Driver</i>	<i>Motor Cycle</i>
Norton Mtrs (1926) Ltd.	J. Guthrie	4.90 Norton
" "	P. Hunt	" "
" "	S. Woods	" "
" "	J. H. Simpson	" "
E. A. Mellors	Entrant	" "
H. Pilling	Entrant	" "
Phil A. E. Vane	Entrant	4.98 Scott
John Marston Ltd.	A. Bennett	4.93 Sunbeam
" "	C. J. P. Dodson	" "
" "	A. Simcock	" "
" "	F. Franconi	" "
S. A. Crabtree	Entrant	3.43 Velocette
H. J. Bacon	Entrant	4.93 Sunbeam
Raleigh Cycle Co., Ltd.	T. F. Bullus	4.95 Raleigh
" "	J. Duncan	" "
" "	J. Williams	" "
James Donald Potts	Entrant	4.98 Grindlay Peerless J.A.P.
Rudge Whitworth Ltd.	G. W. Walker	4.99 Rudge-Whitworth
" "	H. J. Tyrell Smith	" "
" "	G. E. Nott	" "
" "	J. Amott	" "
Walter Denney	Entrant	" "
W. H. T. Meaghen	Entrant	4.98 Rex Acme J.A.P.
New Gerrard Motors	J. A. Porter	3.48 New Gerrard J.A.P.
W. Montgomery & Co.	S. Jackson	4.97 Montgomery J.A.P.
D. N. Chrystall	Entrant	4.98 Grindlay Peerless J.A.P.
W. J. Lord, Coventry Mtr. Mart, Ltd.	D. Lamb	4.90 Norton
A. J. Stevens & Co. (1914) Ltd.	W. L. Handley	4.95 A.J.S.
" "	Tommy Spann	" "
" "	F. A. Longman	" "
H. Mathews	Entrant	4.90 Norton
Geo. Griffiths	Entrant	" "
Scott Mtr. Cycle Co., Ltd.	S. Gleave	4.98 Scott
" "	T. L. Hatch	" "
" "	A. Franklyn	" "
" "	O. Langton	" "
" "	E. Mainwaring	" "
Fred. C. Hicks	Entrant	3.48 Velocette
Cotton Motor Co.	C. W. Johnston	4.98 Cotton
" "	B. L. Heatt	" "
" "	J. Whalley	" "
H. J. Willis	Entrant	3.48 Velocette
Derby & D.M.C.	F. G. Craner	" "
C. T. Ashby, Ltd.	C. T. Ashby	4.96 O.K. Supreme
Tom Simister	Entrant	3.48 Velocette
D.O.T. Motors, Ltd.	K. Twemlow	4.97 D.O.T. J.A.P.
" "	E. Twemlow	" "
T. G. Byrne	Entrant	4.90 Norton
O.K. Supreme Motors, Ltd.	J. Sarkis	2.45 O.K. Supreme J.A.P.

PROVISIONAL ENTRIES JUNIOR T.T. RACE, 1929.

Norton Motors (1926) Ltd.	J. Guthrie	3.48 Norton
" "	P. Hunt	" "
" "	S. Woods	" "
" "	J. H. Simpson	" "
Chater-Lea Manf. Co., Ltd.	B. E. Scott	3.48 Chater-Lea

PROVISIONAL ENTRIES JUNIOR T.T. RACE, 1929-continued.

Entrant	Driver	Motor Cycle
W. Bentley	R. G. Bentley	346 Levis
New Imp. Motors (1927) Ltd.	E. A. Mellors	346 New Imperial
"	W. Evans	"
"	L. S. Horton	"
John Marston, Ltd.	C. J. P. Dodson	347 Sunbeam
"	A. Simcock	"
"	F. Franconi	"
"	G. L. Emery	"
Hirst Mitchell	Alec Mitchell	348 Raleigh
"	Entrant	"
S. A. Crabtree	Entrant	343 Velocette
Raleigh Cycle Co., Ltd.	J. Williams	348 Raleigh
"	R. MacGregor	"
James Donald Potts	Entrant	346 Grindlay Peerless J.A.P.
C. S. Barrow	Entrant	346 Levis
W. H. T. Meageen	Entrant	346 Rex Acme J.A.P.
New Gerrard Motors	J. A. Porter	346 New Gerrard J.A.P.
W. Montgomery & Co.	S. Jackson	345 Montgomery J.A.P.
W. J. Lord, Coventry Mtr. Mart, Ltd.	D. Lamb	348 Norton
A. J. Stevens & Co. (1914) Ltd.	W. L. Handley	346 A.J.S.
"	Tommy Spann	"
"	F. A. Longman	"
"	R. F. Parkinson	"
Don Hall	Entrant	348 Velocette
Taylor-Himing Mtr. Co.	G. E. Himing	Zenith J.A.P.
J. W. Shaw	Entrant	348 Velocette
A. W. Griffin	Entrant	349 A.J.S.
Cotton Motor Co.	C. W. Johnston	348 Cotton
"	B. L. Hieatt	"
Veloce Ltd.	D. Viewing	"
"	A. Bennett	348 Velocette
"	F. G. Hicks	"
"	H. J. Willis	"
C. T. Ashby, Ltd.	C. T. Ashby	346 New Imperial
Tom Simister	Entrant	348 Velocette
D.O.T. Motors, Ltd.	K. Twemlow	345 D.O.T. J.A.P.
"	E. Twemlow	"
"	W. Burrows	"
Dunham & Haines	W. S. Braidwood	348 Velocette

PROVISIONAL ENTRIES LIGHTWEIGHT RACE, 1929.

Entrant	Driver	Motor Cycle
New Imp. Motors (1927) Ltd.	F. L. Hall	246 New Imperial
"	F. W. Clark	"
"	S. H. Jones	"
S. A. Crabtree	L. C. Crabtree	246 Excelsior J.A.P.
"	Len Higson	"
"	J. H. Blackburn	"
"	Entrant	"
Rex Motor Manf. Co., Ltd.	C. E. Needham	248 Rex Acme
C. S. Barrow	Entrant	248 Royal Enf. J.A.P.
W. H. T. Meageen	Entrant	246 Rex Acme J.A.P.
New Gerrard Motors	J. A. Porter	248 New Gerrard J.A.P.
W. Montgomery & Co.	S. Jackson	245 Montgomery J.A.P.
S.O.S. Motors, Ltd.	H. Lester	250 S.O.S. (J.A.P.)
New Henley Motors, Oldham	G. L. Boudin	248 New Henley Blackburne
"	C. Tattersall	249 New Henley J.A.P.
"	A. Greenwood	"
Taylor-Himing Mtr. Co.	G. E. Himing	Zenith J.A.P.
W. L. Handley	F. L. Taylor	O.K. Supreme J.A.P.
J. W. Shaw	Entrant	O.K. Supreme J.A.P.
Cotton Motor Co.	Entrant	245 O.K. Supreme J.A.P.
"	C. W. Johnston	248 Cotton
"	B. L. Hieatt	"
"	G. Emery	"
Vic. Anstice	Entrant	249 O.K. Supreme
James Whalley	Entrant	248 Cotton J.A.P.
The Gleave Eng. Co.	S. Gleave	S.G.S. J.A.P.
"	S. Pearce	"
C. T. Ashby, Ltd.	C. T. Ashby	245 O.K. Supreme J.A.P.
D.O.T. Motors, Ltd.	E. Twemlow	245 D.O.T. J.A.P.
"	K. Twemlow	"
"	W. Burrows	"
"	G. J. Wilks	"
O.K. Supreme Motors, Ltd.	J. Sarkis	245 O.K. Supreme J.A.P.
"	F. A. Longman	"
Pietro Gherzi	Entrant	248 Guzzi

WHAT IS THE SPELL OF SPEED?

Why is it that we are all so attracted by what Major Sir Henry Segrave has rightly named the "Lure of Speed?" What is it that compels us to open wide the throttles of our Motor Cycles, and press our accelerators firmly down against the floor boards of our cars? We are all fascinated by this extraordinary sensation SPEED. But why? Can it be explained? The lure is as great to the aged, as it is to the young, nor is it confined to the motorist and motor cyclist.

This strange longing for speed is experienced in all forms of movement. The horseman at full gallop, the Skier leaping from dizzy heights, the cyclist

whizzing through the air at 15 m.p.h. They are all striving to attain one end—"Speed."

The lure is not a desire for any definite number of miles per hour. No! it is the "all out" feeling that is really the great aspiration. Like some soothing drug, speed causes an exquisite sensation of rapturousness. More speed and yet still more, the ground flies from under us. We advance the ignition to the uttermost; we open wide the extra air. Perhaps the supercharger comes into action. We lay ourselves flat upon the tank of our Motor Cycle and endeavour to reach that extra mile per hour, which is so thrilling and exhilarating, and we are forgetful of all around us in sheer obliviousness. The ecstasy of what? Can it be explained?

THE TARGA FLORIO.

Albert Divo wins Sicilian Classic on a Bugatti.

ON May 5th last the twentieth Targa Florio road race was run on the famous Sicilian Circuit. This is the oldest and most strenuous race in the world and tests the driver's strength and skill to the utmost since it is run over the treacherous Sicilian mountains. The course consisted of five circuits of the island each of 64 miles, 320 miles in all.

There were twenty starters, the first away being Campari driving an Alfa Romeo. During the third lap Divo, who was driving a Bugatti, passed Campari and took the lead which he managed to maintain until the end. Only six of the twenty starters managed to finish the course, and all cars of 1,100 c.c. retired. Of the six finishers two were disqualified.

RESULTS:—

1. Albert Divo (Bugatti) 46.27
2. Minora (Bugatti) 45.7.
3. Brilli Peri (Alfa Romeo).
4. Campari (Alfa Romeo).

ROYAL AIR FORCE DISPLAY.

This year the Annual Display given by the Royal Air Force in aid of Service Charities, will take place at Hendon on Saturday, the 13th July. One of the principal events will be an air attack on a fortified fort involving its destruction by fire. This is quite a new feature, and should prove of great interest. It is hoped that a record attendance will be secured, and we are asked to inform readers that tickets may be obtained from the Display Secretary, Hendon, N.W. 9, from any Royal Air Force Station, or the usual Agencies.

The R.A.C. will again be in charge of the official car parks outside the Aerodrome. There are five of these parks, capable of holding in all over 3,000 vehicles, the charges being 2/6 for cars, 6d. for

motor cycles, and 5/- for charrs-a-banc. All the parks adjoin the aerodrome. It should be noted that parking on roads in the vicinity of the Aerodrome is prohibited by the police.

BRITISH MOTOR BOATS SUCCESS

The British-built Dunelt outboard boat, the introduction of which was announced recently, gained its first racing successes a few days ago in the meeting at the Edgbaston Reservoir, organised by the Midland Outboard Racing Club.

There were eight competitors in classes A. and B.—250 and 350 c.c. engine capacity, respectively. The new Dunelt won class A in convincing style, and came in second in class B. All except one of the other competing boats were of foreign manufacture, and the success of the Dunelt is thus all the more satisfactory.

MOTOR CYCLE TAX CONCESSION

It will be remembered that, following representations made by the R.A.C. and other bodies, the Chancellor of the Exchequer announced in his Budget Speech that it was proposed to raise the weight limit of motor cycles taxed at 30/- per annum from 200 lbs. to 224 lbs. This concession is embodied in the Second Finance Bill for 1929, and the sanction of Parliament is necessary before it becomes law, but the R.A.C. is able to announce that, subject to this sanction being obtained, the new weight limit will come into force on January 1st, 1930.

INTERNATIONAL AERO EXHIBITION

Aircraft Manufacturers are now busily engaged in preparing for the International Aero Exhibition to be held this year at Olympia from July 16th to 27th. It is anticipated that this will be one of the finest Aero Exhibitions ever held. Some interesting Light Aeroplanes will be on show including the Blackburn Bluebird, an account of which appears on page 83.



THE BLACKBURN BLUEBIRD LIGHT AEROPLANE.

THE BLACKBURN BLUEBIRD.

WE have received some very interesting particulars in regard to the recent flight of Squadron Leader Slator, who set out on March 8th on a flight to South Africa in the first new all metal Blackburn Bluebird Machine. We understand that no record was attempted, but with practically no preliminary testing, the machine started on this lengthy trip, and, apart from a slight defect in the petrol tank, which was rectified at Tunis, no trouble was incurred on the whole of this long distance flight, which shows that the Blackburn Aeroplane Co. have produced a particularly excellent machine.

The "Bluebird Mark IV" is constructed of Metal and is supplied with interchangeable wheel, and float chassis, so that it may be used on land or sea. The wings are of single bay Biplane construction. The fusilage is made up of three distinct units easily disconnected for repair. The "Bluebird" is the only British Light Aeroplane fitted with an adjustable Tail Plane, the tail incidence being controllable

in the air, and on the ground, from the Cockpit. Petrol is supplied to the engine by gravity through Petroflex piping. The petrol tank holds 23 gallons, which is sufficient for 5 hours running.

Three different engines are now being fitted to "Bluebird Mark IV" Machines, and it is interesting to note that with a Gipsy Engine fitted, a speed of 109 m.p.h. can be obtained. With "Genet" and "Cirrus III" engines fitted, the maximum speeds are 98 m.p.h. and 107 m.p.h. respectively. These are top speeds at ground level.

Many sporting Motorists are now taking up flying, and there is no doubt that for those who can afford it, there are many attractions in owning a light aeroplane. In fact for the enthusiast who wishes to visit sporting events in various parts of England and the Continent, an aeroplane is essential. The Blackburn "Bluebird Mark IV" may be purchased with many useful fittings for under £800, which is an extremely moderate price for a high class machine of this character.

FOR TRIALS ENTHUSIASTS.



We recently had an opportunity of trying one of the series of watches just placed on the market by A. Arnold and Co., 17, Elmcroft Avenue, Golders Green, N.W.2. Since the possession of a reliable watch is a necessity to those who take part in trials, etc., we give herewith a few particulars of this new range of timekeepers.

Three are illustrated; one which has no hour or minute hands but is fitted with a fly-back action sells at 25/-. The "Sportsman" centre-seconds chronograph is a thirty hour watch with ordinary minute and hour hands, and a centre-seconds hand which

can be stopped and started by means of a knurled projection on the rim. This watch sells at the extremely low price of 10/6. The particular watch we tested was the Split Second Chronograph, which is fitted with independent fly-back action and a 15 jewelled lever mechanism of the highest class. Stop watch minute, seconds and fifth seconds hands are provided, in addition to the ordinary hour and minute hands. We found this watch extremely useful in an acceleration test and dead accurate at the finish of the trial. With a 5 years' guarantee it is very reasonably priced at £3 10s.

SCORED CYLINDERS. Scores in cylinder bores can be filled in by Barimar Metallurgical (Patented) Process, to fit existing pistons and returned in two days under money back guarantee, at low cost.—BARIMAR, LTD. (Scientific Welding Engineers), 14-18, LAMB'S CONDUIT STREET, LONDON, W.C.1. Branches in Birmingham, Manchester, Leeds, Newcastle-on-Tyne and Glasgow.

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